Introduction

This handbook has been written, assembled, and compiled to help those in the Laboratory who must prepare proposals going to a wide variety of funding agencies. These pages contain all the materials, source policy documents, examples, and blank forms the proposal writer will need to meet virtually any situation.

The Business Operations Division (BUS-OPS), with the assistance of various program offices, has gathered into one volume the rules, regulations, guidelines, forms, formats, policy, and procedures for preparing both DOE and non-DOE proposals for funding. All types of proposals, and some other types of funding packages are described in detail; each chapter is complete in itself.

It is the intention of BUS-OPS to keep this handbook updated by issuing revisions as changes are made to DOE requirements and subsequent Laboratory policy.

BUS-OPS will be maintaining updates for this handbook. Please call your BUS-OPS Division analyst with any questions on proposal preparation.

Department of Energy Program Policy

Los Alamos National Laboratory is owned by the Department of Energy (DOE) and managed, under contract, by the University of California.

The foremost and overriding Laboratory mission is support of the weapons program for DOE. All other work, by DOE order, must be in support of DOE's mission and the Lab's mission, and must in no way interfere with programs supporting the missions.

DOE Budget Submission

Most DOE proposals are written in response to budget calls sent out by the Controller's Office of DOE or DOE Defense Programs, in compliance with DOE Order 5700.7A, "Field Work Package Proposal and Authorization System," and Office of Management and Budget Circular A-11.

We submit our proposals for work to be done two years from the time of submission. In other words, in the spring of 1994, we will be preparing budgets for FY 1996. These budgets are coordinated carefully between the program offices and line organizations here at LANL, with approval required of both the line and the program associate directors, and the Controller's Office.

A few DOE proposals are prepared outside the regular budget cycle. In these cases, we must have all the line and program approvals that any other proposal requires, including Controller's Office signature. Details of proposal preparation are covered in Chapter 2.

Reimbursable Policy

Background

Los Alamos National Laboratory has from its inception been owned by the U.S. Government and operated, under contract, by the University of California. Until 1964, the Laboratory was supported solely by the Atomic Energy Commission (AEC), the first ancestor of the DOE. In 1965, the Laboratory received its first small funding from other federal agencies (OFA), which represented less than half of one percent of total Lab operating funds. Through the AEC's descendants, the Energy Resource and Development Administration (ERDA) and then the Department of Energy (DOE), the Lab's reimbursable funding grew until, in FY 1990, it represented 30% of the total Laboratory operating funds of $950M.

DOE Policy

Admiral James D. Watkins, former Secretary of Energy, said the following in a statement before the U.S. Senate Committee on Energy and Natural Resources, February 22, 1989.

"I know that the Department of Energy's national laboratories are home to some of the world's brightest and most innovative scientists and engineers. These creative minds are a precious national asset and will be encouraged not only to continue their basic research, but also to improve the process by which new technologies are transferred..."

Because of DOE ownership of LANL, most non-DOE work must be accepted and approved by the Albuquerque Operations Office of DOE (DOE/AL) on behalf of the Laboratory. Lab policy, of necessity, must be based on, and consistent with, DOE policy on reimbursable work.

The following DOE Orders set out the fundamental policies in this area.

1. DOE Order 5600.1 states that "The utilization of the capabilities of the weapons complex in support of DOE's non-weapon responsibilities or other programs of national interest is encouraged but limited to the extent that such utilization does not adversely impact the weapon program."

2. DOE Order 4300.2B, Non-Department of Energy Funded Work, contains the principal policy statements in this area. Work to be accepted on behalf of the Lab must

   a) be consistent with and complementary to DOE's mission and the mission of the Lab;

   b) not adversely affect execution of assigned programs of the Lab;

   c) not place the Lab directly in competition with the domestic private or public sectors;

   d) not create a potentially detrimental future burden on commitment of DOE resources;

   e) be consistent with DOE order 5600.1 (see 1 above);

   f) be consistent with the legislative authority of DOE;

   g) be consistent with humane treatment of human and animal subjects involved in research or other activities of the government;

   h) result in full cost recovery to DOE.

3. DOE Order 2200.6, Change 2, "Financial Accounting," replacing 2100.10A, "Financial Policies and Procedures for Reimbursable Work," details financial arrangements including the requirement that funding be advanced before work is initiated and that no work continue when the funding has been fully obligated.

Laboratory Policy

Director Sig Hecker articulated Laboratory policy with regard to non-DOE-funded (reimbursable) work in his memorandum to Master Management, "Reimbursable Work," dated October 15, 1987. In his memo, which is included in this section, he spells out the goals for reimbursable work, criteria for LANL's accepting this work, and the responsibility for implementation of this policy.

All organizations of LANL are expected to comply with the following guidelines.

1. The Laboratory will accept only that work that is consistent with our mission.

2. The Laboratory will not compete directly with the public or private sectors.

3. The Laboratory will avoid circumventing the Competition in Contracting Act (CICA) and the Economy Act by accepting funds from other agencies of government solely for the purpose of aiding that agency in avoiding government procurement regulations (pass-through funding).

4. No organization may accept reimbursable work strictly to protect existing staffing levels.

Financial Policy

Procurements

The Laboratory cannot accept pass-through funds, that is, those funds from another federal agency to purchase for them goods and services it would be more difficult for them to procure.

It is a violation of the Competition in Contracting Act for the Laboratory to accept funds from other federal agencies solely for the purpose of aiding those agencies in evading government procurement regulations. DOE/HQ has written a description of pass-through procurement which follows in this section.

Financial Reporting

Information to a sponsor concerning cost estimates can be included in the proposal provided that the detail is no greater than the levels on the Operating Budget System (BUCS) operating plan. Requirements for each type of proposal are shown in the individual chapters of this document.

Cost information may be reported to the sponsor, upon request, at the same levels mentioned above. A special report has been devised on BUCS, the Operating Cost Report (OCR), especially for such reporting. A sample OCR is furnished in this chapter. The following provisos should be kept in mind:

1. All official cost information must come from DOE/Albuquerque Operations Office (AL). They will give a single, YTD total only, but it is the only official cost data. LANL can supply the level of detail spelled out on the OCR; however, this information is unofficial.

2. All cost information for public dissemination (newspapers, radio, TV, government officials, etc.) must be coordinated through the Controller's Office. Project leaders and fiscal analysts may send the OCR to their sponsors as they see fit.

3. Names of specific persons, their salaries, or lists of individuals actually working on a particular program may not be supplied to any individual or organization outside the Laboratory.

4. No BUCS operating plans or accounting operating statements may be provided to anyone outside the Laboratory.

Cost Estimates

Estimating Proposal Costs

An estimate of resources is required on all proposals; these resources are usually expressed as labor (FTEs), overhead (burden), division/group support, materials and services, and major procurements. Estimates should be constructed in the same way costs are collected through the Laboratory financial management systems, that is, using the following categories:

Salary and Fringe can be found for each cost center in the Salary Factor Tables in BUCS.

Burden can be found in Section 8000 of the Financial Management Handbook.

Division/Group Support rates can be found in the Financial Management Handbook.

Miscellaneous Salaries

Material

Travel

Services (CCF, Lab Services, Shop)

Other Material & Services (M&S)

Major Procurement

Integrated Contractor Cost

Questions to Consider in Determining Resource Requirements

1. Is the proposed work similar to work currently performed or performed in the past?
2. Is the work M&S intensive? Are program-specific M&S levels similar to/higher/lower than previous years? How was M&S calculated (as a percent, bottoms-up, etc.) in the past? Is the level of requested M&S defensible?
3. For ongoing programs, is the work more or less labor intensive than in previous fiscal years?
4. How was the mix of staff members and other employees (technicians, support staff) arrived at?
5. Have official Laboratory salary factors been applied for Laboratory organizations performing the work?
6. Has a contingency been applied consistent with the relative level of technical and schedule risk?
7. Have all elements of cost (see above) been identified and estimated?
8. Acquisition strategy—will the work be performed by Laboratory organizations or contracted outside the Lab?
9. Have MAT, or equivalent estimates been obtained for major items of equipment, major procurements, and for services to be acquired?
10. Have all ES&H and security costs been identified and estimated?
11. What cost options were considered in accomplishing the technical program for the minimum expense?
12. Does the final estimate reflect the complexity of the program and represent an accurate assessment of the funds necessary to accomplish the stated technical objectives?
13. Has the estimate been documented and will it withstand audit scrutiny?

DOE ORDER 5700.2C, “Cost Estimating, Analysis, and Standardization,” sets out six methods for preparing cost estimates.

1. **Bottoms-Up Technique.** The statement of work is used as the point of departure in estimating the resources needed to perform each operation or each task.

2. **Specific Analogy Technique.** The known cost of an item or operation used in the past is used as the basis for estimating cost in the current situation, with appropriate adjustments.

3. **Parametric Technique.** This method requires historical data on similar programs or operations. Statistical analysis is performed on the data to find correlations between cost drivers and other system parameters; the analysis produces cost estimating relationships which can be used individually or grouped into complex models.

4. **Cost Review and Update Technique**. In this case, previous costs of the same program or project are examined for internal logic, completeness of scope, etc., and then updated to reflect new conditions.

5. **Trend Analysis Technique.** A contractor efficiency index is derived by comparing originally projected costs against actual costs on work performed to date. The index is then used to adjust the cost estimate of work not yet completed.

6. **Expert Opinion Technique.** Several specialists or experts may be consulted until a consensus cost estimate is established.

Regardless of how the cost estimate is generated, all cost estimates on all proposals must be approved by the appropriate BUS-OPS budget analyst before the proposal package leaves the Laboratory.

Documenting Cost Estimates

In a report to former President Bush, Admiral Watkins described the management control program implemented by DOE in response to the Federal Managers' Financial Integrity Act.

DOE management control evaluations had disclosed as a "material weakness" the DOE's process for formulating budget estimates. Of particular interest to the Laboratory was the finding of "inadequate contractor documentation to support cost estimates."

To correct this deficiency and to prepare for DOE monitoring of corrective action in the area of cost estimating procedures and practices, LANL will be initiating and filing supplemental back-up materials for every proposal, beginning immediately.

The office of the Program Manager or Program Fiscal Contact (PFISCON) should contain a file holding documentation to support all aspects of the cost estimate for every proposal, both DOE and non-DOE. The documentation should explain the technical organization's estimate of the number of FTEs needed for the particular project, as well as the amount of M&S requested. If the organization maintains that each of their FTEs costs X dollars, it should be documented how they arrived at that figure.

Some organizations have developed their own form to hold this information; there is no Lab-wide format at present.

Responsibilities

The originator of the proposal, usually the Project Leader or Principal Investigator, is responsible for the accuracy and completeness of the proposal package.

Environment, Safety, and Health Considerations

A checklist, a copy of which appears in this chapter, has been developed to satisfy Laboratory and DOE objectives and requirements relating to environment, safety, and health (ES&H) considerations. This form, which must be completed and submitted to DOE/AL together with each proposal, both DOE and non-DOE, is intended to be responsive to increased public and employee interest and concern about ES&H.

HS Division has prepared this checklist, Form 1306; however, the responsibility for filling it out and assuring its accuracy rests with the Project Leader (Principal Investigator) and the appropriate line management. HS is available to provide guidance in completing the form, which is intended to assure that

1. ES&H is formally considered for each proposal;

2. Potential ES&H cost impacts (start-up, routine operations, shutdown, etc.) are considered;

3. Potential delays (due to preparing assessments, obtaining permits, modifying facilities, etc.) are considered; and

4. The Principal Investigator (PI) may request HS guidance before formal proposal approval.

The ES&H checklist is the departure point when an extended level of analysis is needed. If such a level of analysis is required, the PI must allow sufficient time for review by HS. In some circumstances the questionnaire and follow-up analysis may be necessary to accurately estimate all costs and time schedules. It would be helpful if PIs evaluated their ES&H concerns as early as possible in the proposal development process. See AR 1-10, found in the Laboratory's Environmental, Safety, and Health Manual.

The ES&H Division point of contact is ES&H-3, Facilities Review, MS K479, 5-4673 or 7-2703. A copy of each proposal checklist should be sent to ES&H-3.

Security and Classification

All non-intelligence-related proposals that identify classified work to be done on site at the Laboratory must be accompanied by Form 1309, "Security Considerations for Non- Intelligence-Related Proposals," a copy of which is supplied in this chapter. The package must be routed for signature through OS-lO, G728, 5-1212. Intelligence-related proposals will follow the security and classification guidelines described in Chapter 6 (Intelligence-Related Reimbursable Proposals).

This requirement applies only to proposals for work to be done here at LANL; if the portion of work to be done here is not classified, but will be added to classified work to be done at a sponsor's site, the LANL proposal is not considered to be classified, and does not need the security form or OS signature. Address all questions on classification to OS-lO.

For all special access programs or work for intelligence agencies, consult Chapter 6, Intelligence-Related Reimbursable Proposals.

Proposal Approvals

The Proposal Approval sheet (examples used throughout this book) must be used to collect the signatures for line and program management. Necessary approvals include the appropriate line supervisors, BUS-OPS analyst, program manager, and division director.

Department of Defense proposals need a final approval by the Program Director for Department of Defense Programs; all other proposals require approval of the Contracts and Grants Officer. Certain directorates require that all proposals passing through their directorate, whether prepared by their divisions or not, must have their approval. See each individual section in this handbook for specific instructions.

Contacts in the Proposal Process

DOE Proposals

Name	Programs	Organization	Phone
Ron Andrews	Weapons Activities	BUS-8	7-4003
Leroy Padilla	Stockpile Support, Program Direction	BUS-8	5-8399
Cecilia Gonzales	Materials Support	BUS-8	5-1524
Stephanie Cisneros	Verif & Control Tech, Export Control, Nonpro-liferation, International Safeguards	BUS-8	7-8124
Horton Struve	Nuclear Safeguards and Security	BUS-8	5-5314
Josephine Rael	Energy Efficiency and Renewable Energy, Nuclear Energy, Policy Planning & Program Evaluation, Fossil Energy	BUS-8	7-7866
Earl Salazar	High Energy Physics, Nuclear Physics, Basic Energy Sciences, Biologi-cal/Enviro. Research, Magnetic Fusion	BUS-8	7-9531
Gayle Travis	Education/Technology	BUS-8	5-4919
Melissa Robinson	Environment, Safety & Health	BUS-8	7-8152
David Holmes	Civilian Radioactive Waste	BUS-8	5-7363
Elisa Sanchez	Environmental Restoration and Waste Management	BUS-8	5-0704
Laura Liles	Field Management, Human Resources & Administration, Controller's Summaries	BUS-2	7-0897
Claudette Thiebolt	Capital Equipment	BUS-2	7-0264
Clyde Sanchez	Construction	BUS-2	5-3158

Reimbursable Proposals

Name	Programs	Organization	Phone
BernaDette Sanchez	Non-Federal R/W	BUS-2	7-1810
Laura Liles	ICs	BUS-2	7-0897
Taylor VanBuren	FIAs, UFAs, CRADAs	BUS-8	5-6747
Cecilia Lujan	Def. R/W, SDI	BUS-2	7-2680
Charly Lovato	NASA	BUS-8	7-1109
Horton Struve	Intelligence	BUS-8	5-5314